UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,410	07/27/2006	Takahiro Honda	06492/HG	7279
FRISHAUF, HOLTZ, GOODMAN & CHICK, PC 220 Fifth Avenue 16TH Floor NEW YORK, NY 10001-7708			EXAMINER	
			SOLOLA, TAOFIQ A	
			ART UNIT	PAPER NUMBER
			1625	
			MAIL DATE	DELIVERY MODE
			10/09/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/587,410	HONDA ET AL.
Office Action Summary	Examiner	Art Unit
	Taofiq A. Solola	1625
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
1)☐ Responsive to communication(s) filed on 24 July 2a)☑ This action is <b>FINAL</b> . 2b)☐ This 3)☐ Since this application is in condition for alloware closed in accordance with the practice under Expression 1.	action is non-final. nce except for formal matters, pro	
Disposition of Claims		
4) Claim(s) 1-11 and 14-27 is/are pending in the 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed.  6) Claim(s) 14 and 15 is/are rejected.  7) Claim(s) 1-11 and 16-27 is/are objected to.  8) Claim(s) are subject to restriction and/or Application Papers  9) The specification is objected to by the Examine	wn from consideration. or election requirement. or.	
10) The drawing(s) filed on is/are: a) accomposition and accomposition accomposition and accomposition accomposi	drawing(s) be held in abeyance. Section is required if the drawing(s) is objection	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureat*  * See the attached detailed Office action for a list*	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date <u>na</u> .	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal F 6)  Other:	ate

10/587,410 Art Unit: 1625

Claims 1-11, 14-27, are pending in this application.

Claims 14-15, are drawn to non-elected invention.

Claims 12-13 are deleted.

## Response to Restriction Requirement

In response to applicant's inquiry, example 3-7 belongs in group II. In a telephone interview, applicant wanted to know how to write the elected compounds. Applicant may write them as species as in claim 10 or as subgeneric of formula I, wherein ring A is as in the examples and, the points of attachment of the substituents on the ring must be specific as in the examples. R1 is optionally substituted phenyl, R2-R4, X, p and q are as defined in claim 1.

The restriction of claims 14-15 is now withdrawn. However, such is deemed amendment to the claims under Rule of Rejoinder. See the Restriction Requirement.

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 14-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 14 is drawn to mechanisms: treating diseases in which angiogenesis or vascular hyper permeability is involved. These are not practical utilities under the US patent practice. To ascertain the practical utilities, one must read the specification into the claims contrary to several precedent decisions by the US courts and Official practice. The claim is an attempt by

10/587,410 Art Unit: 1625

applicant to claim treatment of all diseases known today and that may be discovered in the future, arising from the mechanisms. It is a reach-through claim and no longer patentable under the US patent practice. A claim must stand alone to define the invention, and incorporation into the claims by reference to the specification or an external source is not permitted. <a href="Ex parte">Ex parte</a>
<a href="Fressola">Fressola</a>, 27 USPQ 2d 1608, BdPatApp & Inter. (1993). By deleting the claim the rejection would be overcome.

Claims 14-15 are rejected under 35 U.S.C. 112, first paragraph, because the specification does not reasonably provide enablement for the claimed mechanism. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

"In the context of determining whether sufficient "utility as a drug, medicant, and the like in human therapy" has been alleged, It is proper for the examiner to ask for substantiating evidence unless one with ordinary skill in the art would accept the [compounds and the utilities] as obviously correct." *In re Jolles*, 628 F.2d 1327, 1332 (Fed. Cir. 1980), citing *In re Novak*, 306 F.2d 924 (CCPA 1962); see 340 F.2d 974, 977-78 (CCPA 1965).

"A specification disclosure which contains a teaching of the manner and process of making and using the invention . . . must be taken as in compliance with the enabling requirement of the first paragraph of § 112 unless there is reason to doubt the objective truth of the statements contained therein which must be relied on for enabling support." *In re Brana*, 51 F.3d 1560 (Fed. Cir. 1995), Id. at 1566, quoting *Marzocchi*, 439 F.2d 220, 223 (CCPA 1971); *Fiers v. Revel*, 984 F.2d 1164, 1171-72 (Fed. Cir. 1993), quoting *Marzocchi*, 439 F.2d at 223; see also *Armbruster*, 512 F.2d 676, 677 (CCPA 1975); *Knowlton*, 500 F.2d 566, 571 (CCPA 1974); *Bowen*, 492 F.2d 859 (CCPA 1974); *Hawkins*, 486 F.2d 569, 576 (CCPA 1973).

10/587,410 Art Unit: 1625

Where there is "no indication that one skilled in the art would accept without question [the instant compounds and method of use] and no evidence has been presented to demonstrate that the claimed products do have those effects *Novak*, 306 F.2d at 928, an applicant has failed to sufficiently demonstrate sufficient utility and therefore cannot establish enablement." *In re Rasmusson*, 75 USPQ2d 1297 (CAFC 2005). The claimed invention is not enabled without undue experimentation for the following reasons:

For rejection under 35 U.S.C. 112, first paragraph, the following factors must be considered. *In re Wands*, 8 USPQ2d 1400, 1404 (CAFC, 1988): "The factors to be considered [in making an enablement rejection] have been summarized as a) the breadth of the claims, b) the amount of direction or guidance presented, c) the presence or absence of working examples, d) the nature of the invention, e) the state of the prior art, f) the relative skill of those in that art, g) the predictability or unpredictability of the art, h) and, the quantity of experimentation necessary, *In re Rainer*, 146 USPQ 218 (1965); *In re Colianni*, 195 USPQ 150, *Ex prate Formal*, 230 USPQ 546. The breath of the claims includes hundreds of thousands compounds. The nature of the invention is using the compounds as pharmaceuticals. There is no known prior art that broadly teaches applicability of the compounds for treating all diseases involving angiogenesis and vascular hyper permeability. For example, see WO 99/37618, WO 01/55114 and WO 02/066470.

It is quite possible that mutations in the genes for the proteins responsible for angiogenesis and vascular hyper permeability may lead to increase level. To use the invention as claimed, one of ordinary skill in the art would have to perform experimentation in every instance to determine if increases are due to genetic mutation in a patient or not. After prospective patients are identified and treated, assays must be performed on each one to determine if treatment is successful. However, the specification fails to disclose a routine

10/587,410 Art Unit: 1625

procedure to perform such assay. Therefore, to make and use the instant invention, one of ordinary skill in the art would have to perform significant amount of experimentation. Such is deemed undue experiment under the US patent practice.

The diseases cited in claim 15, as arising from angiogenesis and vascular hyper permeability are mere speculations. There is no conclusive evidence in the specification that established nexus between the diseases and the mechanisms.

There is no absolute predictability or established correlation between the claims and the specification disclosures. The uncertainty presents one of ordinary skill in the art with obstacles and prevents her from accepting the invention on its face. Predictability in the art refers to the ability of one skilled in the art to extrapolate the disclosed or known results to the claimed invention. See Ex parte Mass, 9 USPQ2d 1746, (1987).

MPEP 2164.01(a) states, "[a] conclusion of lack of enablement means that, based on the evidence regarding any of the above factors, the specification, at the time the application was filed, would not have taught one skilled in the art how to make and/or use the full scope of the claimed invention without undue experimentation. *In re Wright*, 999 F.2d 1557, 1562, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993)." That conclusion is clearly justified here. By deleting the claim the rejection would be overcome.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 14-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. For the reasons set forth above under 35 USC 112, first paragraph the claims are indefinite. See the Examiner's suggestions above.

## Allowable Claims

Claims 1-11, 16-27, are objected to for containing non-elected inventions, and would be in condition for allowance if amended within the scope of the elected invention. See Response to Restriction Requirement above.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

## Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taofiq A. Solola, PhD. JD., whose telephone number is (571) 272-0709.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres, can be reached on (571) 272-0867. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.

Application/Control Number: 10/587,410

Art Unit: 1625

Page 7

/Taofiq A. Solola/

Primary Examiner, Art Unit 1625

October 7, 2008